

114.2 - Lubricating Oils

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	1083	1085b	1818a	1819a	1848
Description	Wear-Metals in Lubricating Oil	Wear Metals in Lubricating Oil	Chlorine in Lubricating Base Oils	Sulfur in Lub. Base Oil	Lubricating Oil Additive Package
Unit Size	(150 mL)	(set (5))	(set (5))	(set (5))	(100 g)

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only

114.2 - Lubricating Oils

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

114.2(1)- Metals in Lubricating Oil

SRM	1083	1085b	1848
Description	Wear-Metals in Lubricating Oil	Wear Metals in Lubricating Oil	Lubricating Oil Additive Package
Unit Size	(150 mL)	(set (5))	(100 g)
Elemental Composition (mass fraction in mg/kg unless noted by an asterik * for %)			
Aluminum (Al)	(<0.5)	300.4	
Arsenic (As)		51.3	
Barium (Ba)		(314)	
Boron (B)		(300)	0.137*
Cadmium (Cd)	(<0.04)	302.9	
Calcium (Ca)		(298)	0.359*
Chlorine (Cl)	(<1.7)	57.6	927
Chromium (Cr)	(<0.02)	302.9	
Cobalt (Co)	(<0.01)		
Copper (Cu)	(<0.5)	295.6	
Hydrogen (H)			12.3*
Iron (Fe)	(<1)	301.2	
Lead (Pb)	(<0.04)	297.7	
Magnesium (Mg)	(<0.1)	297.3	0.821*
Manganese (Mn)	(0.005)	(289)	
Molybdenum (Mo)	(<0.01)	(296)	
Nickel (Ni)	(<0.4)	295.9	
Nitrogen (N)			0.57*
Phosphorus (P)		299.9	0.788*
Silicon (Si)	(<1)	300.2	50
Elemental Composition (mass fraction in mg/kg unless noted by an asterik * for %)			
Silver (Ag)	(<0.05)	304.6	
Sodium (Na)	(<0.06)	305.2	
Sulfur (S)	(980)		2.3270*
Tin (Sn)	(<0.4)	(294)	
Titanium (Ti)	(<5)	301.1	

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only

114.2 - Lubricating Oils

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

Vanadium (V)	(<i><0.3</i>)	<i>297.8</i>	
Zinc (Zn)	(<i><0.08</i>)	<i>296.8</i>	<i>0.873*</i>

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only

114.2 - Lubricating Oils

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

114.2(2)- Sulfur and Chlorine in Lubricating Base Oil

SRM	1818a	1819a
Description	Chlorine in Lubricating Base Oils	Sulfur in Lub. Base Oil
Unit Size	(set (5))	(set (5))
Elemental Composition (mass fraction in mg/kg)		
I	31.6	423.5
II	60.0	741.1
III	78.2	4022
IV	154.4	4689
V	234.0	6135

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only